SPECIFICATION AMENDMENTS:

Please replace the paragraph bridging pages 5 and 6 with the following amended paragraph:

--Referring to Fig. 2, the process cartridge 12Y is of integral construction. The photoconductive drum 16Y rotates in a direction shown by arrow C. A charging roller 31, the LED head 13Y, a developing unit 30, the transfer roller 14Y, and a cleaning ~~roller~~ blade 37 are disposed around the photoconductive drum 16Y. The developing unit 30 holds toner 32 therein and includes a developing blade 36, a developing roller 34 that rotates in a direction shown by arrow D, and a toner-supplying roller 35. Because the process cartridge 12Y is a consumable item and cannot be refilled with the toner 32, the process cartridge 12Y is replaced in its entirety when the toner 32 is exhausted.--

Please replace the paragraph bridging pages 7 and 8 with the following amended paragraph:

--Then, the toner image is transferred by the transfer roller 14Y onto the print paper 17. The cleaning ~~roller~~ blade 37 scrapes residual toner 32 from the photoconductive drum 16Y.--

Please replace the paragraphs staring on page 8, line 31 through page 12, line 30, with the following amended paragraph:

--If no abnormal condition has occurred in any one of the process cartridges 12Y, 12M, 12C, and 12BK, then the print controller 23 reads the detection information from the detection section 22 (S6) and determines based on the detection information whether color shift, image density, hue, and γ characteristic of the respective colors are within predetermined ranges, thereby determining whether an image has been formed normally, in other words, whether an abnormal condition has occurred (S7). For this purpose, in the image adjustment mode, a test image pattern is formed on the transfer belt 20. The test image pattern is read by the detection section 22 to detect color information on the respective color developer such as color shift, image density, hue, γ characteristic of the respective colors for the respective process cartridges 12Y, 12M, 12C, and 12BK.

If the items of respective detection information are within corresponding predetermined ranges and therefore no abnormal condition has occurred, the print controller 23 initiates printing. If the items of respective detection information is not within corresponding predetermined ranges, then it is determined that an abnormal condition has occurred. Thus, the print controller 23 records the occurrence of an abnormal condition, the date and time of the occurrence of the abnormal condition, and the specific abnormal condition into a memory in the print controller 23 and then into the recording device 33 (S8).

The print controller 23 also causes the display 85 to display the occurrence of abnormal condition and the specific abnormal condition (S10), and then stops the operation of the color electrophotographic printer to prohibit printing (S11).

If the items of detection information fall in predetermined ranges after eliminating the abnormal condition so that images can be normally formed, the print controller 23 performs an error recovery operation in which the abnormal condition is removed. In accordance with the error recovery operation, information such as the removal of abnormal condition and the date and time of recovery from the abnormal condition is stored into the memory in the print controller 23 and the recording device 33. Then, the print controller 23 resumes printing. Alternatively, even when the printer has recovered from an abnormal condition so that an image can be formed normally, the print controller 23 may not resume printing but ~~enter~~ enters the next operation in response to a command of removing an abnormal condition.

The flowchart will be described.

Step S1: Enter an image adjustment mode.

Step S2: Read data from the recording device 33.

Step S3: Determine whether an abnormal condition has occurred.

Step S4: Display an abnormal condition

Step S5: Prohibit printing

Step S6: Read detection information

Step S7: Determine whether an abnormal condition has occurred. If an abnormal condition has occurred, then proceed to step S8, if no abnormal condition has occurred, then terminate the abnormal detection operation

Step S8: Record log information into the memory in the print controller 23

Step S9: Record the log information into the recording device 33

Step S10: Display information on an abnormal condition on the display

Step S11: Prohibit printing

The recording device 33 will be described.

Fig. 5 is a block diagram of the recording device 33 according to the first embodiment.

Referring to Fig. 5, the recording device 33 includes an information memory 50, and a controller 54, and the loop antenna 55. The information memory 50 stores at least color information of the items of information on the model of printer, log information, and color information. The controller ~~50~~ 54 performs the overall control of the recording device 33. The loop antenna 55 is used for transmitting signals to and receiving signals from the antenna coil 81 provided in the read/write device 80 on the printer body. The information memory 50 includes a color information area 51, the model-of-printer area 52, and a log information area 53. The information memory 50 takes the form of a rewritable non-volatile memory. When the information memory 50 is to store all of the model-of-printer information, log information, and color information, the information memory 50 can take the form of, for example, an EEPROM, a battery-backed up memory, or a flash

memory. When the information memory 50 is to store only the color information, the information memory 50 can take the form of, for example, a mask ROM, or an EEPROM.

The information memory 50 is connected to the controller 54, and the controller 54 controls the loop antenna 55 and an I/O. The controller 54 has a power supply that supplies electric power to the controller 54 and the information memory 50 by way of induced current supplied via the loop antenna 55.

The controller 54 performs control so that when the process cartridges 12Y, 12M, 12C, and 12BK have been attached to the image forming sections P1-P4, electric power is generated by the current induced through the loop antenna 55 from the printer body. The controller 54 performs control only when the process cartridges 12Y, 12M, 12C, and 12BK have been attached to the image forming sections P1-P4 properly. The controller 54 transmits the model-of-printer information, log information, and color information to the printer body. When the process cartridges 12Y, 12M, 12C, and 12BK have been misplaced, the controller 54 does not perform control and does not send the information, i.e., the model-of-printer information, log information, and color information to the printer body. As a result, the print controller 23 cannot read the data from the recording device 33 and therefore determines that at least one of the process cartridges 12Y, 12M, 12C, and 12BK has abnormal conditions.

In the present embodiment, upon simply attaching the process cartridges 12Y, 12M, 12C, and 12BK to the image forming sections of the printer, it can be

determined whether an abnormal condition has occurred. Therefore, the embodiment prevents inadvertent misplacement of the process cartridges 12Y, 12M, 12C, and 12BK, so that the toners of different colors can be prevented from being mixed.

The embodiment eliminates the possibility of a defective process cartridge being used, preventing damage to the printer body. The occurrence of an abnormal condition, date and time of the occurrence, and the specific abnormal condition are recorded in the log information area 53, ~~set~~ so that the cause of the abnormal condition can be determined as well as the maintenance of the electrophotographic printer can be improved.

Second Embodiment

A second embodiment uses a process cartridge in which a toner cartridge can be replaced.

Fig. 6 illustrates an outline of a process cartridge for yellow that can be replaced. The process cartridges 40Y, 40M, 40C, and 40BK are of the same construction and therefore the process cartridge 40Y for yellow will be described by way of example.

As shown in Fig. 6, the process cartridge 40Y is provided with a toner cartridge 41Y that is detachably mounted to a body 39 of the process cartridge 40Y. The toner cartridge 41Y holds the toner 32 therein and has the recording

device 33. The process cartridge 40Y is attached to a body of a color electrophotographic printer of the tandem type.

The body 39 of the process cartridge 40Y includes a photoconductive drum 16Y that rotates in the direction shown by arrow E. A charging roller 31, an LED head 13Y, a developing unit 30, a transfer roller 14Y, and a cleaning ~~roller~~ blade 37 are disposed around the photoconductive drum 16Y. The developing unit 30 holds the toner 32 therein and includes a developing blade 36, a developing roller 34, and a toner-supplying roller 35. The developing roller 34 rotates in a direction shown by arrow F and deposits the toner 32 to an electrostatic latent image formed on the photoconductive drum 16Y. The toner-supplying roller 35 supplies the toner 32 to the developing roller 34. The process cartridge 40Y is designed such that toner 32 can be replenished. Thus, when the toner 32 is exhausted, the toner cartridge 41Y can be replaced.--